FOERSTER (F.)

Abortion as an Etiological Factor in Gynæcology and its Treatment.

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Undoubtedly, most cases of disease of the female genital tract can be traced directly to a defective child-birth. A large contingent follows such cases, in which from one or another cause the normal period of gestation is interrupted, in which a premature expulsion of the products of conception occurred. It is a daily occurrence, that the Gynæcologist, to his question: "Since when are you ailing?" receives the answer: "Since the birth of my last child," or, "that of a prior one," but often, "since such and such an abortion or miscarriage."

It is not my task to ventilate all the causes by which the normal labor can act in a deleterious way on the female genital tract. Some changes or derangements, which sooner or later may give rise to complaints, can occur even with the normal confinement. I only wish to remind you of the extreme stretching the whole tract experiences, the subcutaneous tearing of the muscular structure of the outlet of the pelvis, the injuries to the cervix and perinæum. We also have to take into consideration that after the uterus is emptied of its contents the tension of the abdominal walls ceases and that all the organs of the abdomen sink to an abnormal level, exerting thus undue pressure upon underlying structures.

But all these causes we must look upon as something natural and the results as unavoidable, yet factors with which we have to deal in Gynæcology. A different aspect is offered by cases, in which by certain influences the physiological act of child-birth is interfered with and is converted into a pathological one—I mean those cases which become infected and have, in consequence, to pass through all the different stages of sepsis. This latter category is certainly yet a most fertile source for future ailment, although we have good reason to assume that our progressive times and the increasing instinctive sense for asepsis will do a great deal to bring improvement in this direction. Such an improvement necessarily must be a slow one, for it is not only the physician who comes under consideration, but also the midwife, who is still doing the greater portion of obstetric work, especially in our larger cities.

We touch hereby a subject which we must confess is sadly

neglected in our country, I mean the question of midwives. While Europe is enjoying for many years the benefit derived from early efforts to regulate the functions of midwives and to take care of their proper instruction and licensing, we still find prevailing in our midst the sadest carelessness in this respect. The schools for Midwifery—if we can call them such—in this country are mostly in the hands of practitioners, who have no respected standing in the profession, who take up the matter simply as a business speculation. Their abodes are in localities not selected with respect to the purpose which they are intended for, but simply to meet the limited amount of funds which the proprietor is able to spend. As competition amongst these institutions is great, the fee asked for a short course is small, the afflux of so-called students is consequently large, especially as no further knowledge of the applicant is required than their ability to read and write.

Is this not a weak point in our community? So much more so when we see what ambitious efforts are made in general to elevate our educational standing. To so-called graduates of these schools our poorer and middle classes take refuge, when the hour of trial for the young mother arrives, do we need to wonder, that she leaves their hands, when alive, mostly as a physical wreck? Is such a state of affairs becoming to our great city or to our still greater country? Is it not high time that some men of integrity take this matter in hand and wipe out the stigma which has long enough stained our reputation? More lives of unfortunate women would be saved than any threatened infectious disease can destroy; hundreds of children would be amongst the living which now through ignorance pass as still-borne. Malpractice thrives vigorously here, and we can not and should not allow the control of this branch of medicine to pass from our hands. Some time ago this question was broached by a practitioner, but no material results have followed his efforts.

I am digressing from my subject, but the importance of the matter is an ample excuse.

When, as we have seen, the normal delivery requires skillful hands for its proper conduction, how much more necessary is this in cases of abortion, an occurrence in itself pathological; and yet we often see these very cases in the hands of ignorant midwives, resulting in consequences which endanger the life of the woman and render her an invalid forever. But even among physicians the importance of an abortion is often underrated and the attention which it deserves is not always given. The same physician who will frown from undertaking any obstetrical manipulation, say application of forceps or peeling off of a placenta without thorough cleansing or disinfection of instruments and hands, we

may see in a case of abortion display an inexcusable carelessness; a superficial washing of the hands, and he is ready to render his questionable services. Fortunately, we find this carelessness not the rule, but the exception. It may be difficult to find a reason for this neglect. The only explanation that I can think of is that in our medical schools the subject "Abortion" does not receive the proper attention. Lying as it does between obstetrics and gynæcology, it so happens that it experiences from both sides but slight consideration. This same reason may hold good as an excuse for the fact that there is no distinct and uniform plan of treatment of abortion up to date.

Let us review the different opinions of our own as well as of Gynæcologists abroad; we see at once the greatest differences therein prevailing.

The minority of practitioners we find abstaining from examination, if they possibly can help it, trusting to a few drugs altogether. Only in cases of persisting hæmorrhage can they be induced to resort to mechanical interference. It must impress us as if the last twenty-five years of advance in surgery have passed by here without leaving their progressive imprints. As then, so to-day, the subject is a *noli me tangere*. The sad experiences of meddlers with this sensitive organ, the uterus, in prae-antiseptic times, seem still to be fresh in their recollection. The majority of practitioners have come, with slight variation, to the following mode of treatment: After the abortion is in progress, symptoms being hæmorrhage and uterine pains, the efforts of nature to throw out the products are assisted by the introduction into the vagina of a packing of cotton tampons; the result usually is a dilatation of the cervical canal and the birth of fœtus plus secundines. When after inspection the latter prove to have come away in toto, the case is considered as ended, a few doses of ergot being given to ensure uterine contractions. When the secundines do not come away, some leave the case to nature, until they become loosened and are expelled; others pack the vagina again, and if not successful, an attempt is made to remove them with the fingers. If this proves ineffectual, the forceps or a dull curette is used to obtain the result. It is not necessary to state that all this must be undertaken with the strictest observance of anti or asepsis.

The results can be temporarily satisfactory, only—exceptionally they are permanently so.

The reason why I consider the result mainly illusory, is because the measures enumerated are inadequate to the condition we have before us.

I believe, whenever an abortion occurs, that we have to deal in most cases with a pathological state of the endometrium, that

our endeavor must be to remove this endometrium and the thereon implanted secundines in toto, if we wish to give our patient the best chance for recovery and avoidance of the recurrence of abortion in the nearest future.

Observers, whom we all esteem highly—Fritsch, Thomas, Schroder, Kaltenbach—speak of an endometritis post abortum and describe this condition as being caused by the retention of portions of the decidua in utero after abortion. These small particles attain an inflammatory character and result in a degeneration of the entire endometrium giving rise to the often met symptom, metrorrhagia post abortum. Küstner has furnished the incontrovertible proof that endometritis is often the outcome of an incomplete abortion, by demonstrating in the midst of an uterine polypus the presence of chorionic villi.

If then the total removal of the decidua is a necessity, can this be done by the above means, especially when we think of the close implantation of the secundines on the uterine mucosa in the second or third month? To do it thoroughly and effectively we have to use an instrument which allows us to reach the deeper structures; we need a sharp curette to obtain this result. Judiciously used we cannot produce any more injury than by the use of a dull instrument.

Whatever the genesis of the abortion may be, constitutional, accidental or criminal, we cannot aid our case in any better way than by a thorough curettage of the endometrium. In constitutional cases the endometrium is not able to functionate properly, is the seat of disease and should be substituted under proper medicinal treatment by a new one. In accidental cases we mostly have to deal with an endometritis, or else the causes, which are often of a trivial nature, would not be able to result in an abortion. In criminal cases it is our absolute duty to remove the endometrium, for we have good reason to assume that the instrument used for producing the abortion may not have been aseptic, a thorough curettage and the establishment of proper drainage will be the only means we have to prevent the spreading of the septic process. Bad after effects do not result from an energetic curettage, retardation of the next menstrual period or amenorrhea for one or two months may occur, surely no disadvantage to women, who are usually in an impaired state of health from the loss of blood which they suffered. If it wants proof that no harm is done to the patients, I can enumerate a number of cases where shortly after such a curettement pregnancy followed, which went on uninterruptedly to full term. Other operators have had similar experiences in this respect. Duvelius mentions sixty cases coming under this category.

I can also point to the fact that after such treatment the sluggish state of the uterus, which is so often found after abortions—I

mean subinvolation—is a thing almost unknown. From a large number of cases which have come under my care, I have yet to see the first one where I regret having performed a curettement; while on the contrary the expectant plan of treatment, induced by misleading or false statements of the patient, has often let me feel keenly the awkwardness of my position when I obtained poor results, simply by allowing my better judgment to be influenced by presenting circumstances.

For a number of years I followed a treatment of abortion, which at first glance may be looked upon as too energetic and often unnecessary. Admitted that in its full extent the treatment may now and then be unnecessary, I can say on the other hand, as we have no means to determine whether all the products of conception have come away, nay, if not sepsis itself is on the onset that we meet by this radical procedure all the indications. The cases of premature birth I would divide into those occurring before, and those after the fifth month of gestation. The latter category we ought to treat in a similar manner as the cases of birth at full term. The placenta being formed, the fœtus having a considerable size, we usually find no difficulty provided that we have the patience to wait for full dilatation of the cervix and that we use the necessary cleanliness. The first class of cases is the one under consideration.

Being summoned to a patient complaining of the usual symptoms of threatened abortion: Uterine contraction, pains and hæmorrhage, our first step must be a careful examination with antiseptic precautions. In case we find the os uteri only very moderately dilated, our whole endeavor should be concentrated to the one point, to relieve the symptoms, thus enabling the patient to continue the menaced gestation.

It is a general opinion of practitioners that when uterine hæmorrhage occurs, combined with uterine contractions, we have no efficacious means to prevent the abortion. We must confess this is generally the case, but would urge most earnestly the necessity that before we lend our hand to bring to a finish the process of gestation, we should try our utmost to give to the case a more favorable termination. It will happen, by carrying out this advice, that cases which we never thought of being able to return to the normal will respond to the means employed, and will thank you eventually for the efforts which you have made. I could relate a number of cases from my own practice, when, contrary to my expectation, I was successful in preserving the life of the fœtus, but will mention only one case, which I delivered lately at full term, after we had been annoyed and frightened every month by considerable uterine hæmorrhage accompanied by dis-

tinct uterine contractions. This patient has had previously two abortions at the third month.

The supreme remedy to prevent a threatened abortion is rest, if necessary opiates or bromides; bed rest must be enjoined for several days after the cessation of hæmorrhage and uterine contractions. I am in the habit of giving, as a matter of routine, a mixture consisting of Extr. Viburn. prunif. flr. and Iod. of Pot., 3 ss. of the first and 3 grs. of the latter every three hours. Rectal enemeta to keep the lower segment of the gut free from fæcal masses, to prevent undue pressure upon the uterus. If these measures prove ineffectual, and the uterine contractions result in dilatation of the cervical canal, I apply, after disinfecting the vagina, to the cervix a packing of sterile gauze, filling the whole vagina as a preliminary step to the emptying of the uterus.

In case I find on first examination the cervical canal dilated and free hæmorrhage, with the possibility that part or whole of the products of gestation have come away, or when they are still in utero, I proceed at once to the removal of the contents.

The situation here is a totally different one from the cases just spoken of. While the os uteri is still closed, the hæmorrhage and pains being not excessive, everything can be gained by waiting; there is no hurry for interference, sepsis is next to impossible.

When the os is patulous, presenting a ready way of access for infection from without to the uterine cavity, matters assume a different aspect; the sooner we interfere energetically, the less we expose our patient to those deleterious influences. I say energetically, for I do not believe in repeated examinations, coupled with fruitless attempts to remove the contents. I believe the finger to be an object much less capable of being kept sterile than a properly constructed curette, its tactile sense, almost suppressed by the narrowness of the canal, is fully compensated by the impressions which are communicated to us in handling skillfully a delicate steel instrument.

The manner in which I proceed is the following: The patient is brought under the influence of an anæsthetic and put on a suitable bed in lithotomy position.

The genitals are scrubbed with soap and water and washed with a sublim. solution 1:1000. The same solution is used for irrigation of the vagina. If lysol is convenient, I prefer this disinfectant in a two per cent. solution, first for its soapy and cleansing qualities, and then for its being non-poisonous in this concentration. By the aid of bullet forceps the cervix is brought down, or in case of parametric infiltration simply fixed and, if necessary, dilated by a slow acting dilator. When dilatation is sufficient, the fœtus and secundines are removed and the uterine

cavity is irrigated by a weak sublim. of lysol solution by a Bozemau-Fritsch catheter. After this is done, I proceed to scrape the interior of the uterus by means of a sharp curette. I repeat the operation until I am satisfied that all portions of the endometrium has been covered, due consideration being given to the region of the cornua. Warm water previously boiled is used for irrigation. When the irrigating fluid returns but slightly bloody, I insert into the uterus, which appears to me non-septic sterile gauze until the whole cavity is tightly packed. In case I have the least suspicion of sepsis, I omit the packing, so as to have perfect drainage. A vaginal sterile tampon and a T bandage conclude this little operation.

The packing of the uterine cavity is done for this reason: as we are not certain that every portion of the endometrium is removed, consequently not every particle of secundines gotten rid of, the mechanical irritation of the gauze, assisted by a few doses of ergot, will bring on energetic contractions of the organ, destroying the vitality of such fragments, which may be still in utero. The gauze is removed on the second or third day, and rest in bed continued for five to six days.

The use of the sharp curette cannot be accompanied by any risk even in the hands of the less experienced one, provided he keeps in mind that he is using a sharp instrument. The danger of perforation of the uterus is much less with a sharp curette than with a dull one, as it would require considerable more force with the latter to obtain the same result; *i. e.*, total removal of endometrium, and consequently the risk of perforation is increased, especially when we have to deal with a soft septic organ.

I do not claim originality for this procedure, as many gynæcologists are using the same successfully, here as well as abroad. When we read in reports from the Continent, that the above results are obtained by the use of a dull curette, we must remember that the dull curette as known to us—the wire loop—is not meant by that expression, but a moderately sharp instrument.

Septic cases I have been treating by careful curettement and intra uterine irrigation of sublim. solution 1:5000; or lysol, 1 to 2 per cent., repeated every three to four hours.

Within the last few years I have changed this treatment somewhat, obtaining favorable results, which hardly could have been anticipated, considering the grave nature of some of the cases. After gentle curettage by means of the sharp curette, I irrigate the uterine cavity with the above solution and insert into it a strip of gauze, well saturated with a sterile mixture consisting of one part of amm. sulpho-ichthyol, and two parts of glycerine. The vagina is then packed loosely with tampons, saturated with the

same mixture. This way of treatment occurred to me two years ago, when I saw in consultation a case of puerperal sepsis, in which by the usual treatment no result whatsoever was obtained. Having read lately a statement concerning the application of ichthyol to the endometrium for endometritis of varying causation, I thought I would try its efficacy in this septic case. I introduced the gauze, saturated with ichthyol glyc., into the uterus, and to my surprise I found after three or four hours a falling of the temperature of four degrees. I repeated the application next day. On the third day I omitted its use, and found a rise of temperature, that evening, to 106. From that time on tampons were introduced daily for ten days, the case terminating in recovery. In a second case of puerperal sepsis, I used the same procedure, with the same happy result. In three cases of beginning sepsis following abortion I have tried the same measure, all cases ending in recovery.

The question comes up: How can this apparently bland application prove so effective? We know that ichthyol has only very limited antiseptic qualities; it cannot be compared to our antiseptics in general use. I am therefore inclined to attribute to it the smaller share of the work done by the two agents, glycerine and ichthyol. I may say that the well known action of ichthyol, on the capillaries in constricting them and diminishing their calibre may come into play here, and I would like to extend this action to a certain degree to the lymphatics, which may be influenced simularly as the blood vessels, being less prone consequently to carry infectious material. The major portion of the action shown I would attribute to the hygroscopic action of the glycerine. This agent, abstracting liquid from the superficial as well as from the deeper structures it comes in contact with, may act in a depleting way upon the lymph-channels and establish to some extent a return flow from the lymphatics, the secretion being facilitated by the previous abrasion of the diseased endometrium.

We may call all this hypothetical; it may be so, but the fact remains that the action of the ichthyol-glycerine in the two puerperal cases stated was a remarkable one, while the results of the three cases of beginning sepsis after abortion we must principally attribute to the curettage, but cannot deny that even here the ichthyol glycerine formed a valuable adjuvant.

I am aware that it is a rather risky thing to propose in a society of general practitioners as ours procedures so surgical and so far-reaching in their consequences if they are undertaken by men not pervaded by the importance of anti and asepsis. Cherishing the hope that you all appreciate the value of anti and asepsis, I have taken the liberty to present my views on this subject to you this evening.